Safety Data Sheet

According to regulations in the United Kingdom of Great Britain & Northern Ireland

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Substance name: **L-427 Super Blu®**

Other means of identification: Kendall® L-427 Super Blu® #2

Code: 831606

UK REACH Registration Number: Not applicable

Issue date: 05-Sep-2023

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Lubricating Grease

Uses advised against: Other uses are not recommended unless an assessment demonstrates potential exposures will be controlled.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier: Phillips 66 Lubricants
A Division of Phillips 66 Company
P.O. Box 421959
Houston, Texas 77242-1959

Customer Service: U.S.: 800-368-7128 or International: 1-832-765-2501

Technical Information: 1-877-445-9198

SDS Information: URL: www.Phillips66.com/SDS
Phone: 800-762-0942
Email: SDS@P66.com

1.4. Emergency telephone number CHEMTREC Global +1 703 527 3887
CHEMTREC UK +(44)-870-8200418

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

No classified hazards

2.2. Label elements

No classified hazards

EUH208 - Contains (Fatty acid derivative of 4,5-dihydro-1H-imidazole). May produce an allergic reaction.

2.3. Other hazards

Does not meet the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent, very bioaccumulative (vPvB) substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Concentration[1]	EINECS	REACH Reg. No
Distillates, petroleum, hydrotreated heavy naphthenic 64742-52-5	50-75	265-155-0	UK-01-8389789201-0
Distillates, petroleum, hydrotreated heavy paraffinic 64742-54-7	10-25	265-157-1	UK-01-1759217276-5
Residual oils, petroleum, solvent-dewaxed 64742-62-7	10-25	265-166-0	UK-01-9191203516-8
1-Propene, 2-methyl-, sulfurized 68511-50-2	1-5	270-943-2	--
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	<2.5	272-028-3	--
Fatty acid derivative of 4,5-dihydro-1H-imidazole	<1	948-074-1	--

(NJTSR 800983-5021P) NONE			

Substance	Classification²	M-Factor/ATE/SCL
Distillates, petroleum, hydrotreated heavy naphthenic 64742-52-5	**	--
Distillates, petroleum, hydrotreated heavy paraffinic 64742-54-7	**	--
Residual oils, petroleum, solvent-dewaxed 64742-62-7	**	--
1-Propene, 2-methyl-, sulfurized 68511-50-2	Aquatic Chronic 4, H413	--
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	Eye Irrit. 2; H319: C>12%
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P) NONE	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	--

[1] All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
** The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I.
See Section 11 for more information.

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye Contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician. (see Note to Physician)

Inhalation: First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

Ingestion: First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation of oil mists or vapours generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea. Prolonged or repeated contact may dry skin and cause irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician: When using high-pressure equipment, injection of product under the skin can occur. In this case, the casualty should be sent immediately to the hospital. Do not wait for symptoms to develop. High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. These injuries often require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury. Early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulphur, nitrogen or phosphorus may also be formed.

5.3. Special protective actions for fire-fighters

For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapours and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorised personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

6.2. Environmental precautions

Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorised drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

6.3. Methods and material for containment and cleaning up

Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from flames and hot surfaces. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).
Spills will produce very slippery surfaces. High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

Do not wear contaminated clothing or shoes. Do not enter confined spaces such as tanks or pits without following proper entry procedures.

7.2. Conditions for safe storage, including any incompatibilities

Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to appropriate guidance pertaining to cleaning, repairing, welding, or other contemplated operations. Outdoor or detached storage is preferred. Indoor storage should meet Country or Committee standards and appropriate fire codes.

7.3. Specific end use(s)

Refer to supplemental exposure scenarios if attached.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits:

Substance	ACGIH	Ireland	United Kingdom	Phillips 66
Distillates, petroleum, hydrotreated heavy naphthenic	TWA-8hr: 5 mg/m³ STEL: 10 mg/m³ as Oil Mist, if Generated	---	---	---
Distillates, petroleum, hydrotreated heavy paraffinic	TWA-8hr: 5 mg/m³ STEL: 10 mg/m³ as Oil Mist, if Generated	---	---	---
Residual oils, petroleum, solvent-dewaxed	TWA-8hr: 5 mg/m³ STEL: 10 mg/m³ as Oil Mist, if Generated	---	---	---

STEL = Short Term Exposure Limit (15 minutes); TWA = Time Weighted Average (8 hours); --- = No Occupational Exposure Limit. Local regulations may be more stringent than regional or national requirements.

Biological Limit Values: None

Relevant DNEL and PNEC: No information available

8.2. Exposure controls

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye protection that meets or exceeds EN 166 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, close fitting eye protection and a face shield may be necessary.

Skin/Hand Protection: The use of gloves impervious to the specific material handled that comply with EN 374 is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Nitrile rubber.

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit an approved air purifying respirator equipped with Type P2 - Medium efficiency particle filters may be used. A respiratory protection programme that follows recommendations for the selection, use, care and maintenance of respiratory protective devices in EN 529:2005 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health.

Environmental Exposure Controls: Refer to Sections 6, 7, 12 and 13.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Data represent typical values and are not intended to be specifications. N/A = Not Applicable; N/D = Not Determined

Physical State:	Semi-Solid
Colour:	Blue
Odour:	Petroleum
Melting / freezing point:	N/D
Initial boiling point and boiling range:	N/D
Flammability (solid, gas):	N/A

Upper Explosive Limits (vol % in air):	N/D
Lower Explosive Limits (vol % in air):	N/D
Flash point:	> 302 °F / > 150 °C
Method:	Cleveland Open Cup (COC), ASTM D92
Autoignition temperature:	N/D
Decomposition temperature:	N/D
pH:	N/A
Viscosity:	N/D
Solubility:	Insoluble
Partition coefficient n-octanol /water (log Kow):	N/D
Vapour pressure:	<0.01 mm Hg
Vapour density:	>1 (air = 1)
Relative density:	0.9511 @ 60ºF (15.6ºC) (water = 1)
Particle characteristics:	N/A

9.2. Other information

9.2.1. Information with regards to physical hazard classes

No information available

9.2.2. Other safety characteristics

Evaporation Rate (nBuAc=1):	< 1
Bulk Density:	920 kg/m³
Pour point:	N/D
Percent volatile:	Negligible
Explosive properties:	N/D
Oxidising properties:	N/D

SECTION 10: Stability and reactivity

10.1. Reactivity	Not chemically reactive.
10.2. Chemical stability	Stable under normal ambient and anticipated conditions of use.
10.3. Possibility of hazardous reactions	Hazardous reactions not anticipated.
10.4. Conditions to avoid	Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.
10.5. Incompatible materials	Avoid contact with strong oxidizing agents and strong reducing agents.
10.6. Hazardous decomposition products	Not anticipated under normal conditions of use.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Likely Routes of Exposure: Inhalation, eye contact, skin contact
Aspiration Hazard: Not expected to be an aspiration hazard.

Acute Oral Toxicity

Product

Classification: Unlikely to be harmful
Oral LD50: > 5 g/kg (estimated)
Remarks: Based on components

Substance	Oral LD50	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	> 5 g/kg	Rat	OECD 401	Based on similar material
Distillates, petroleum, hydrotreated heavy paraffinic	> 5 g/kg	Rat	OECD 401	Based on similar material
Residual oils, petroleum, solvent-dewaxed	> 5 g/kg	Rat	OECD 401	Based on similar material
1-Propene, 2-methyl-, sulfurized	> 5 g/kg	Rat	Similar to OECD 401	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	2.15 g/kg	Rat	Other: QSAR	Estimated
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	> 2 g/kg	Rat	OECD 401	

Acute Dermal Toxicity

Product

Classification: Unlikely to be harmful
Dermal LD50: > 2 g/kg (estimated)
Remarks: Based on components

Substance	Dermal LD50	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	> 2 g/kg	Rabbit	OECD 402	Based on similar material
Distillates, petroleum, hydrotreated heavy paraffinic	> 2 g/kg	Rabbit	OECD 402	Based on similar material
Residual oils, petroleum, solvent-dewaxed	> 2 g/kg	Rabbit	OECD 402	Based on similar material
1-Propene, 2-methyl-, sulfurized	> 2 g/kg	Rabbit	Similar to OECD 434	Based on similar material
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	7 g/kg	Rabbit	Other: QSAR	Estimated
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	No data			

Acute Inhalation Toxicity

Product

Classification: Unlikely to be harmful
Inhalation LC50 : >5 mg/L (mist, estimated)
Remarks: Based on components

Substance	Inhalation LC50	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	> 5 mg/L	Rat	Similar to OECD 403	Based on similar material
Distillates, petroleum, hydrotreated heavy paraffinic	> 5 mg/L	Rat	Similar to OECD 403	Based on similar material
Residual oils, petroleum, solvent-dewaxed	> 5 mg/L	Rat	Similar to OECD 403	Based on similar material
1-Propene, 2-methyl-, sulfurized	> 3 mg/L	Rat	Other: Non-guideline	Vapour, Based on similar material
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	> 5 mg/L	Rat	Other: Non-guideline	
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	No data			

Serious Eye Damage/Irritation

Product

Classification: Causes mild eye irritation
Remarks: Based on components

Substance	Classification	SCL	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	Not expected to be irritating.		Rabbit	Similar to OECD 405	Based on similar material
Distillates, petroleum, hydrotreated heavy paraffinic	Not expected to be irritating.		Rabbit	Similar to OECD 405	Based on similar material
Residual oils, petroleum, solvent-dewaxed	Not expected to be irritating.		Rabbit	Similar to OECD 405	Based on similar material
1-Propene, 2-methyl-, sulfurized	Causes mild eye irritation.		Rabbit	Similar to OECD 405	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Causes serious eye irritation	Eye Irrit. 2; H319: C>12%	Rabbit	Similar to OECD 405	
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	Not expected to be irritating.			OECD 437	

Skin Corrosion/Irritation

Product

Classification: Causes mild skin irritation
Additional Information: Repeated exposure may cause skin dryness or cracking
Remarks: Based on components

Substance	Classification	SCL	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	Not expected to be irritating.		Rabbit	Similar to OECD 404	Based on similar material
Distillates, petroleum, hydrotreated heavy paraffinic	Not expected to be irritating.		Rabbit	Similar to OECD 404	Based on similar material
Residual oils, petroleum, solvent-dewaxed	Not expected to be irritating.		Rabbit	Similar to OECD 404	Based on similar material
1-Propene, 2-methyl-, sulfurized	Causes mild skin irritation		Rabbit	Similar to OECD 404	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Causes skin irritation		Rabbit	Similar to OECD 404	
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	Not expected to be irritating.			OECD 439	

Respiratory Sensitisation

Product

Classification: No information available

Substance	Respiratory Sensitisation:	SCL	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	No information available				
Distillates, petroleum, hydrotreated heavy paraffinic	No information available				
Residual oils, petroleum, solvent-dewaxed	No information available				
1-Propene, 2-methyl-, sulfurized	No information available				
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	No information available				
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	No information available				

Skin Sensitisation

Product

Classification: No information available on the mixture, however none of the components have been classified for skin sensitisation (or are below the concentration threshold for classification)

Substance	Skin Sensitisation	SCL	Species	Method	Remarks
Distillates, petroleum, hydrotreated heavy naphthenic	Not expected to be a skin sensitizer		Guinea pig	Similar to OECD 406	Based on similar material
Distillates, petroleum, hydrotreated heavy paraffinic	Not expected to be a skin sensitizer		Guinea pig	Similar to OECD 406	Based on similar material
Residual oils, petroleum, solvent-dewaxed	Not expected to be a skin sensitizer		Guinea pig	Similar to OECD 406	Based on similar material
1-Propene, 2-methyl-, sulfurized	Not expected to be a skin sensitizer		Guinea pig	Similar to OECD 406	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Not known to be a skin sensitizer		Guinea pig	Similar to OECD 406	
Fatty acid derivative of 4,5-dihydro-1H-imidazole	May cause an allergic skin reaction		Mouse	OECD 429	

(NJTSR 800983-5021P)					

Specific target organ toxicity - Single exposure

Product

Classification: No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification)

Substance	Specific target organ toxicity - Single exposure	Target Organs
Distillates, petroleum, hydrotreated heavy naphthenic	Not expected to cause organ effects from single exposure.	
Distillates, petroleum, hydrotreated heavy paraffinic	Not expected to cause organ effects from single exposure.	
Residual oils, petroleum, solvent-dewaxed	Not expected to cause organ effects from single exposure.	
1-Propene, 2-methyl-, sulfurized	No information available	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	No information available	
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	No information available	

Specific target organ toxicity - Repeated exposure

Product

Classification: No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification)

Substance	Specific target organ toxicity - Repeated exposure	SCL	Method	Target Organs
Distillates, petroleum, hydrotreated heavy naphthenic	Not expected to cause organ effects from repeated exposure		Similar to OECD 408 OECD 410 OECD 412	
Distillates, petroleum, hydrotreated heavy paraffinic	Not expected to cause organ effects from repeated exposure		Similar to OECD 408 OECD 410 OECD 412	
Residual oils, petroleum, solvent-dewaxed	Not expected to cause organ effects from repeated exposure		Similar to OECD 408 OECD 410 OECD 412	
1-Propene, 2-methyl-, sulfurized	Not expected to cause organ effects from repeated exposure		Similar to OECD 408 OECD 410	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	No information available			
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	No information available			

Carcinogenicity

Product

Classification: No information available on the mixture, however none of the components have been classified for carcinogenicity (or are below the concentration threshold for classification)

Substance	Classification	Method
Distillates, petroleum, hydrotreated heavy naphthenic	Not expected to cause cancer.	Similar to OECD 451 OECD 453
Distillates, petroleum, hydrotreated heavy paraffinic	Not expected to cause cancer.	Similar to OECD 451 OECD 453
Residual oils, petroleum, solvent-dewaxed	Not expected to cause cancer.	Similar to OECD 451 OECD 453

1-Propene, 2-methyl-, sulfurized	No information available	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	No information available	
Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P)	No information available	

Additional Information

Distillates, petroleum, hydrotreated heavy naphthenic
This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

Distillates, petroleum, hydrotreated heavy paraffinic
This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

Residual oils, petroleum, solvent-dewaxed
This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

Reproductive/Developmental/Teratogenic effects

Product

Classification: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification)

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)			
Endpoint type	**Method**	**Result**	**Remarks**
Effects on fertility Effects on fetal development	OECD 421	Based on available data, the classification criteria are not met	
Effects on fetal development	OECD 414	Based on available data, the classification criteria are not met	

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)			
Endpoint type	**Method**	**Result**	**Remarks**
Effects on fertility Effects on fetal development	OECD 421	Based on available data, the classification criteria are not met	
Effects on fetal development	OECD 414	Based on available data, the classification criteria are not met	

Residual oils, petroleum, solvent-dewaxed (64742-62-7)			
Endpoint type	**Method**	**Result**	**Remarks**
Effects on fertility Effects on fetal development	OECD 421	Based on available data, the classification criteria are not met	
Effects on fetal development	OECD 414	Based on available data, the classification criteria are not met	

Mutagenic effects

Product

Classification: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification)

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)		
Method	**Result**	**Remarks**

OECD 474	Negative	Based on similar material
OECD 471	Negative	Based on similar material
OECD 473	Negative	Based on similar material
OECD 476	Negative	Based on similar material

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)		
Method	**Result**	**Remarks**
OECD 474	Negative	Based on similar material
OECD 471	Negative	Based on similar material
OECD 473	Negative	Based on similar material
OECD 476	Negative	Based on similar material

Residual oils, petroleum, solvent-dewaxed (64742-62-7)		
Method	**Result**	**Remarks**
OECD 474	Negative	Based on similar material
OECD 471	Negative	Based on similar material
OECD 473	Negative	Based on similar material
OECD 476	Negative	Based on similar material

1-Propene, 2-methyl-, sulfurized (68511-50-2)		
Method	**Result**	**Remarks**
Similar to OECD 471	Negative	
Similar to OECD 475	Negative	

Fatty acid derivative of 4,5-dihydro-1H-imidazole (NJTSR 800983-5021P) (NONE)		
Method	**Result**	**Remarks**
OECD 471	Negative	

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors
11.2.2 Other Information

None known

SECTION 12: Ecological information

12.1. Toxicity
All acute aquatic toxicity studies on samples of lubricant base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions.
12.2. Persistence and degradability
The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.
12.3. Bioaccumulative potential
Log Kow values measured for the hydrocarbon components of this material are greater than 5.3, and therefore regarded as having the potential to bioaccumulate. In practise, metabolic processes may reduce bioconcentration.
12.4. Mobility in soil
Volatilisation to air is not expected to be a significant fate process due to the low vapour pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of the hydrocarbon constituents in soil and sediment.
12.5. Results of PBT and vPvB assessment
Not a PBT or vPvB substance.
12.6 Endocrine disrupting properties
This product does not contain any known or suspected endocrine disruptors
12.7 Other adverse effects

None anticipated.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

European Waste Code: 13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils. This material, if discarded as produced, would be considered as hazardous waste pursuant to Directive 2008/98/EC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

This code has been assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste generators/producers are responsible for assessing the actual process used when generating the waste and it's contaminants in order to assign the proper waste disposal code.

This material under most intended uses would become "waste oils" due to contamination by physical or chemical impurities. Whenever possible, Directive 75/439/EEC suggests recycling of "waste oils" in accordance with current national and regional provisions.

Empty Containers: Container contents should be completely used and containers emptied prior to discard. Empty drums should be properly sealed and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with applicable regulations.

SECTION 14: Transport information

14.1. UN number

Not regulated

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

This product does not meet the DOT/UN/IMDG/IMO criteria of a marine pollutant

14.6. Special precautions for user

None

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EC 1272/2008 - Classification, labelling and packaging of substances and mixtures
EN166:2002 Eye Protection
EN 529:2005 Respiratory Protective devices
BS EN 374-1:2016 Protective gloves against chemicals and micro-organisms
Occupational Exposure Limits, Technical Rules for Dangerous Substances
Occupational Exposure Limits, Health and Safety Authority
Workplace Exposure Limits, EH40/2005, Control of Substances Hazardous to Health
Federal Water Act on the Classification of Substances Hazardous to Waters
Directive 2008/98/EC (Waste Framework Directive)

Export Rating: NLR (No Licence Required)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the substance/mixture.

SECTION 16: Other information

Issue date: 05-Sep-2023

Status:	FINAL
Previous Issue Date:	09-Sep-2022
Reason for Revision:	Label Elements Composition/information on ingredients Occupational Exposure Limits Physical and Chemical Properties Toxicological Information
SDS Number:	**831606**
Language:	BE

List of Relevant Hazard Statements:
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects
H413 - May cause long lasting harmful effects to aquatic life

Key literature references and sources for data:
Information used includes one or more of the following: results from internal company data, supplier toxicology studies, CONCAWE Product Dossiers and other publicly available resources.

Guide to Abbreviations:
ACGIH = American Conference of Governmental Industrial Hygienists; ADR = Agreement on Dangerous Goods by Road; BMGV = Biological Monitoring Guidance Value; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA = [US] Environmental Protection Agency; Germany-TRGS = Technical Rules for Dangerous Substances; IARC = International Agency for Research on Cancer; ICAO/IATA = International Civil Aviation Organisation / International Air Transport Association; INSHT = National Institute for Health and Safety at Work; IMDG = International Maritime Dangerous Goods; Irland-HSA = Ireland's National Health and Safety Authority; LEL = Lower Explosive Limit; MARPOL = Marine Pollution; N/A = Not Applicable; N/D = Not Determined; NTP = [US] National Toxicology Programme; PBT = Persistent, Bioaccumulative and Toxic; RID = Regulations Concerning the International Transport of Dangerous Goods by Rail; STEL = Short Term Exposure Limit; TLV = Threshold Limit Value; TRGS 903 = Technical rules for hazardous substances; TWA = Time Weighted Average; UEL = Upper Explosive Limit; UK-EH40 = United Kingdom EH40/2005 OEL; vPvB = very Persistent, very Bioaccumulative

Disclaimer of Expressed and implied Warranties:
The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorisation is given nor implied to practice any patented invention without a licence.